

# **SECTOR 5**

#### THE RED SEA—RAS KASAR TO RAS SIYAN

**Plan.**—This sector describes the W side of the Red Sea between Ras Kasar and Ras Siyan, on the W side of Bab el Mandeb. The general descriptive sequence is SE from Ras Kasar.

# **General Remarks**

**5.1** The coast is in general a low-appearing arid plain, rising gradually to the interior plateau. The mountains, some of which attain an elevation of 3,048m, form an escarpment to the plateau and have a peculiarly abrupt and precipitous appearance. No rivers of any importance flow into the Red Sea.

Between Ras Kasar and Mitsiwa Harbor, the plain, with scattered isolated hills, ranging from about 43 to 244m high, varies in width from about 10 to 20 miles. Southeast of Mitsiwa Harbor, the plain is from about 1 to 10 miles wide.

The coast between Ras Sciaks and Ras Terma (13°14'N., 42°33'E.) is backed by ranges of high volcanic mountains sloping to the sea. Southeast of Ras Terma, on the W side of the N approach to Bab el Mandeb, the general aspect of the land is high, rugged, mountainous toward the interior, and barren toward the coast. The mountains descend in successive lower ranges toward the coast.

The Inner Channel on this side of the Red Sea continues S as Canale di Massaua, which lies W and SW of the islands and shoals of Dahlach Bank.

**Caution.**—Unconfirmed reports were received concerning underwater explosions, possibly caused by mines, near ships in the area of Bab el Mandeb.

Additionally, a vessel was believed to have struck a mine at 18°25'N, 40°10'E. Another vessel was reported to have struck a mine in position 26°48'N, 34°39'E.

No further reports have been received concerning mining activities in the Red Sea, and the areas concerned are believed to be safe for surface navigation. However, vessels are urged to exercise the appropriate caution.

# Ras Kasar to Mitsiwa Channel

**5.2 Ras Kasar** (18°02'N., 38°35'E.) is low, with sparse vegetation, and is not easily identified from a distance. The rocky bank here extends about 2 miles offshore. Between Ras Kasar and Taclai, the N entrance to Mitsawa Channel, about 34 miles SSE, the coast is fringed with a reef; depths of less than 30m extend up to 15 miles from the coast.

There are few easily identifiable landmarks along this stretch of coast. About 5 miles inland from a position 7.5 miles SSE of Ras Kasar is a series of low hills; farther inland are mountains, a few of which are sharp enough to be clearly defined.

**Middit** (17°47'N., 38°36'E.) has two peaks and shows up well from a distance. Abghendabu, about 8 miles SSE of Middit, has a prominent tomb on its S ridge.

Monte Noret (Nohrat), about 6 miles farther SSE, is 106m high at its S end. This rugged ridge of hills rises toward its S end, where it terminates in a bluff.

**Scenat** (17°31'N., 38°46'E.) lies about 6 miles SSE of Monte Noret. From a distance, Scenat, resembling a fort, appears isolated, and is easily identified.

**Tepsa** (17°26'N., 38°47'E.), separated from Scenat by land sloping to the coast, has a white color. At sunrise it has the appearance of a white mass with dark rocky hills at either end, but with the sun behind the group, three conspicuous peaks are visible at its S end.

About midway between Scenat and Tepsa, there is an isolated dune, which is a good mark from seaward.

Baki stands about 6 miles SE of Tepsa. A beacon stands on its N shoulder. Several of the hills in the vicinity of Baki have cairns on their peaks, but the beacon on Baki is unmistakable.

West of Canale di Massaua, the character of the Abyssinian Mountains is the same. Flat tablelands prevail, their axis running N and S, but here and there sharp peaks break the line and are good marks when they can be identified.

For the most part, a broad sandy plain rises gradually from the coast to the base of these ranges, where it attains an elevation of about 305m. The plain is dotted with small hills, generally conical in shape, the elevations of which are dwarfed in appearance by the mountains inland and by the almost imperceptible slope of the plain. This should be borne in mind when attempting to identify these hills from the chart.

**5.3** Mersa Berisse (18°00'N., 38°35'E.), on the S side of Ras Kasar, is about 2 miles wide. The coast in the vicinity is low, sandy, and backed by high land; a village is on the shore of this bight. The coastal reef extends about 1 mile from the shore in places, and the sea breaks on it. There are depths of 5.5 to 9.1m off this reef, where dhows anchor.

**Hasmet** (17°44'N., 38°44'E.), about 19 miles SE of Ras Kasar, is a small bight in the coastal reef, where boats anchor.

The shore in the vicinity is low, swampy, and backed by high land.

**Samadrisat** (17°36'N., 38°49'E.), about 9 miles SSE of Hasmet, is a low projecting point, which is easily distinguished from other parts of this coast by high trees; they front the coast for about 1 mile, there being no other for 20 miles in either direction.

**Taclai** (17°31'N., 38°52'E.) has a conspicuous one-story brick building with a small tower, about 14.9m high, in the center.

The tower is painted in black and white squares. Around this building are several small houses, and a little farther inland are two small buildings and some huts. The brick building and tower were reported to be in ruins.

A small, sheltered boat harbor, about 2 miles N of Taclai, is formed by two partially-ruined moles. A few huts and two masonry buildings stand a little S of the harbor. Near the extremity of one of the moles is a beacon.

The coast from Taclai to Mitsiwa Harbor is described beginning in paragraph 5.9.

# Mitsiwa Channel

**5.4** Mitsiwa Channel is the passage between the coast and Dahlak Bank; the bank is described beginning in paragraph 5.5. The width in the fairway varies from 2.5 to 14 miles, and the depth ranges from 18.3 to 128m, with occasional shoal patches. It is divided into North Mitsiwa Channel and South Mitsiwa Channel, about 210 miles long.

The channels afford a safe and convenient passage, which may be navigated day or night. The passage is lighted, but caution is necessary, as the islands are low, steep-to, and not easily seen.

**Winds—Weather.**—In North Mitsiwa Channel, the prevailing N winds are stronger during the day than at night. They blow somewhat from the land during the early morning and veer to the NE during the day.

A low barometer is commonly followed about 2 days afterward by a N wind, which sometimes sets in suddenly and rather fresh, while at other times it sets in gradually; in both cases, it is preceded by light clouds. The barometer rises and remains high as long as the winds last.

When S winds prevail throughout the channel, they generally blow strongly from the SE by day, while at night they veer toward the NW and become lighter. The wind from the SW is remarkably dry, but when it shifts to the S or SE, the wet bulb thermometer quickly rises several degrees. The barometer gives no warning of the approach of strong S winds, but falls as soon as the wind commences. These winds seldom last more than 4 days.

In South Mitsiwa Channel, S winds prevail and cause considerable swell, which is experienced S of and near **Isola Sciumma** (15°32'N., 40°00'E.). The remarks as to the shifting of the wind in the N passage also apply here.

Frequently, the wind is SE and fresh to the S of Isola Sciumma, while off Isola Difnein and **Isola Harat**  $(16^{\circ}05'N., 39^{\circ}28'E.)$ , the wind is from the N. Off Mitsiwa, the sea breeze is generally from E.

**Tides—Currents.**—The direction of the currents is extremely variable. In January and February, the SE winds in the middle of the Red Sea are strongest and cause a S surface current along the shore of the channel. This set is much influenced, however, by the local winds in the channel and by the tidal currents.

In South Mitsiwa Channel, during January and February, S currents have been observed to prevail against S winds, but in March and April, the current sets usually to the N. However, the current seems to be governed to a great extent by the local winds.

During April of one year, after 5 days of continuous SE winds, the current was found to be setting NW off Ras Kasar at a velocity of 1.5 knots.

In North Mitsiwa Channel, the tidal currents set S during the rising tide and N during the falling tide; they are often very regular. At other times, the S current does not cease but is only checked by the N current.

In South Mitsiwa Channel, the tidal currents are weak and variable; they appear to meet in The Narrows, in the vicinity of Isola Sciumma.

**Anchorage.**—Anchorage can be taken nearly anywhere along the W shore of North Mitsiwa Channel. In most places, there is no shelter from SE winds. The holding ground is generally good, and, except in South Mitsiwa Channel, the space is too confined for much sea to get up.

#### Dahlak Bank

**5.5 Dahlak Bank** (16°00'N., 40°00'E.), a vast area consisting of islets, islands, rocks, reefs, and shoals, obstructs the offshore approaches to the coast in this part.

The dangers on Dahlak Bank extend from Saunders Reef in latitude 17°12'N, to and including Seven Fathoms Bank in latitude 14°52'N, a distance of about 182 miles in a SE direction; these dangers are best seen on the chart.

In general, the depths on this bank are less than 73m, the outer edge of the bank being steep-to and at one point lying 78 miles from the coast.

The islands on this bank are fringed by reefs; they lie between the parallels of 16°37'N and 15°23'N, with the N island being Isola Difnein, and the S island being Isola Bullissar. The channels between these island are of moderate depth and interspersed with many shoal patches.

For about 50 miles S of **Isola Entaentor** (16°20'N., 40°14'E.), the dangers are almost continuous; no channel exists across this part of the bank to the W shore.

**Caution.**—Dahlak Bank is composed principally of sand and coral, with occasional patches of mud. From the nature of the bottom, there is a great probability that uncharted shoal patches exist; due caution should therefore be exercised when navigating in this area. If large in extent, the coral reefs are sometimes visible, but those of sand cannot be distinguished from the light-colored water prevalent on the banks.

In most parts of the Red Sea, the reefs are steep-to and can easily be distinguished by the difference in color of the water, as they nearly always show white.

Mariners are advised to proceed with particular caution when navigating in the reef area anywhere E of North Mitsiwa Channel. The area is inadequately surveyed and uncharted shoals may exist.

**5.6** Saunders Reef (17°11'N., 39°24'E.), the N danger on Dahlak, is a 3.5m coral patch on which the sea has been seen to break.

**Fawn Reef** (Secca Fawn) (16°59'N., 39°35'E.), lying 16.5 miles SE of Saunders Reef, has a depth of 5m. Other banks, with depths of as little as 5m, lie within 9 miles of Fawn Reef.

**Gannet Bank** (16°59'N., 39°13'E.), with a least depth of 6.7m, lies 16 miles SW of Saunders Reef. The position of this bank is not always indicated by discolored water, but when the current is setting, swell and ripples are apparent.

**Isola Harmil** (16°31'N., 40°10'E.), the northernmost island on Dahlak Bank, is low, wooded, and irregular in shape. A projection of a reef extends about 1 mile SE from the SE end of the island.

Isola Seil Harmil, lying on the extremity of this projection, is marked by a beacon.

Several isolated shoals, with depths of as little as 5.8m, lie between 14 miles N and 20 miles SSE of Isola Harmil. Soundings are reported to give little warning of their proximity.

**Isola Difnein** (16°37'N., 39°20'E.), the NW island on Dahlak Bank, is covered with mangroves. Parts of the coasts of the island are fringed by reefs. There is a water tank on its SW point. The island is marked by a light. Isola Difnein is reported to give a good radar return up to a distance of 13 miles.

**Caution.**—Caution is necessary on that part of Dahlak Bank lying N and E of Isola Difnein. This area has been only partially surveyed, and there are many indications of shoal patches not yet charted.

**5.7 Secca Duo Braccia** (16°37'N., 39°29'E.), with a least depth of 3.7m, lies on an 18.3m bank about 9 miles E of Isola Difnein, and can usually be seen. A detached 5.5m shoal lies close W of the middle of Secca Duo Braccia.

A current was observed setting W in the channel, W of Isola Difnein and in the vicinity of Secca Duo Braccia, at a velocity of 1 knot. Between Difnein and the coast, a NW current, up to 2 knots, was experienced when the wind was from E to SE.

**Isola Asbab** (16°26'N., 40°05'E.), about 4 miles WSW of the SW extremity of Isola Harmil, is low and bushy. It is fringed with sunken rocks on its E and SE sides. A beacon stands on Isola Asbab.

**Isola Entesile** (16°30'N., 39°19'E.), about 7 miles S of Isola Difnein, is small, 6.1m high, and covered with dense bush. It is fringed by reef; a bank with depths less than 5.5m extends about 1 mile N from the islet. A shoal, with a least depth of 6.4m, lies close S of the islet. Anchorage can be taken NW of Isola Entesile, in 22m, coral, but the depths increase rapidly.

**Isola Entaentor** (16°20'N., 40°14'E.) is low, bushy, and fringed by a reef, with a beacon standing on the N part of the island. Anchorage can be obtained, in 18m, about 1 mile W of the beacon.

Between Isola Entaentor and the N side of Dehalak Deset, about 29 miles SSW, is a line of islands and islets, all lying on a shallow bank, on which are many rocks. These islands, which may best be seen on the chart, are low and composed of sand or sand and coral.

Many other dangers lie from 18 miles NE of Isola Entaento to 70 miles SE of Ras Scioche, the SE extremity of Dehalak Deset, and may best be seen on the chart.

**5.8 Isola Hucale** (16°20'N., 40°05'E.), low and bushy, lies about 9 miles W of Isola Entaentor. Isola Seil Anber, small, wooded, and 9m high, is about 5 miles W of Isola Hucale.

**Isola Isratu** (16°20'N., 39°53'E.), one of the highest islands on Dahlak Bank, has several small peaked hills. A peninsula, terminating in Ras Haral, extends about 2 miles S from the SE end of the island. A beacon stands on the E extremity of Isola Isratu. A beacon stands on Ras Haral. The SW end of the peninsula close W of Ras Haral is marked by a beacon. Another beacon stands on a hill on the SW side of the island.

**Isola Seil Adasi** (16°20'N., 39°56'E.) is marked by a beacon. **Isola Enta-idell** (16°08'N., 39°51'E.) is sandy and rocky. A beacon stands on the W side of the island.

**Isola Adbara Chebir** (16°00'N., 39°50'E.) is marked by a beacon. Isola Dehel, 6.1m high and flat, lies about 11 miles WSW of Isola Adbara Chebir. Near the NW side of the island is a village with a white square mosque. About 0.5 mile SE of this village is a grove of tall palms.

**Isola Dur Gaam** (15°47'N., 39°45'E.), wooded and fringed by a reef, lies in a position 8.5 miles SE of Isola Dehel. A beacon stands on Isola Dur Gaam.

Isola Dur Ghella, 2 miles E of Isola Dur Gaam, is a narrow, wooded island. A beacon stands on the S extremity of Isola Dur Ghella.

#### Taclai to Mitsiwa

**5.9** Taclai (17°31'N., 38°52'E.) has been previously described in paragraph 5.3. Beacons, 3m high, stand near the coast, about 10 miles and 12.5 miles SSE of Taclai; the latter beacon is reported partly in ruins, but is still visible.

**Kavet** (Cavet) (16°58'N., 39°03'E.) is 34 miles SSE of Taclai. A conspicuous wreck lies on the shore approximately 4.5 miles NNW of Kavet.

**Victoria Peak** (16°52'N., 38°32'E.), dome-shaped and 2,256m high, lies at the N end of a flat range and, when visible, is the most easily-identified mark for the entrance of the N passage. This peak appears the same from all directions and is the highest mountain in the vicinity.

The Paps, about 26 miles ESE of Victoria Peak and 11 miles inland, is a double-peak hill. On some bearings, it appears as three peaks, and with the smaller hills near, it may often be seen when the higher peaks are obscured. The Paps rises about 183m above the surrounding plain.

**Termab** (16°39'N., 38°40'E.), 132m high and on which there is a white cone, stands 17 miles SE of the Paps.

**Handellai** (Kandellai) (16°37'N., 39°10'E.), an islet on the coastal reef 22 miles SSE of Kavet, is covered with mangroves and not easily identified until close. The coast in this vicinity consists of mangrove swamp; the coastal reef here extends 2 miles offshore.

**5.10 Mersa Gulbub** (16°25'N., 39°11'E.), lying about 11 miles S of Handellai, is a small indentation in the coast. A plantation, with an airfield close S of it, is situated near the shore; otherwise the coast for several miles on each side is completely barren.

**Ras Kuba** (16°20'N., 39°12'E.) lies 5.5 miles SSE of Mersa Gulbub. The intervening coast is sandy, with several off-lying shoals. The coast from Ras Kuba to Ras Arb, about 36 miles further SSE, is also sandy.

**Melahat** (16°02'N., 39°15'E.), 18 miles S of Ras Kuba, and its locality are backed by swamps, beyond which are ranges of low, barren sand hills. Salt works stand near the coast, about 7 miles SSE of Melahat. They are generally well lighted at night and provide a good mark.

**Isola Harat** (16°06'N., 39°28'E.) presents a uniformly flat outline. The N part of the island is 10.6m high; the S part is 9.1m high, with a few bushes, some huts, and a beacon.

Isola Sceic El Abu, low and sandy, lies on the S side of the reef that extends W from the S side of Isola Harat. The islet is marked by a light.

Secche Harat, extending about 9 miles NNW from the N extremity of Isola Harat, has depths less than 11m and is generally visible.

A series of small banks, with a least depth of 9.1m, extends about 6 miles farther NNW.

Seil Badira, a small islet 4.5m high, lies on Secche Harat, in a position about 2 miles N of Isola Harat.

A detached shoal, with a least depth of 10.1m, principally sand, lies about 11 miles NNW of the N end of Isola Harat; this shoal shows distinctly.

Anchorage can be taken, in 14.6m about 2 miles NW of the SW end of Isola Harat, clear of the dangers off the W side of the island.

**Ras Arb** (15°48'N., 39°26'E.) is reported to be low, rounded and sandy. The coastal bank extends about 1 miles E from the point; large masses of floating weeds have been observed in this vicinity. Ras Arb is reported to give a good radar return up to a distance of 27 miles.

Secca Oreste, with a least depth of 7m, sand and coral, lies about 3 miles E of Ras Arb.

Emberemi Tomb is about 5 miles SSW of Ras Arb and about 1 mile inland. It has a domed roof and is conspicuous from N. In clear weather it can usually be seen from a distance, and even in hazy weather it can usually be distinguished.

**5.11 Jebel Karamburra** (15°43'N., 39°08'E.) is a rounded summit, about 2 miles from NW end of a range of hills, which are about 8 miles long. When the higher mountains are visible, the hills of this range appear insignificant, but they often show well when the former are obscured.

Jebel Karamburra, being nearly detached from the range and of a bold rounded form, makes a good mark under such circumstances.

**Ras Dogon** (15°38'N., 39°29'E.), the N entrance point to Mitsiwa Harbor, lies about 9 miles SSE of Ras Arb.

**Directions.**—If arriving from the N and bound through North Mitsiwa Channel, pass about 10 miles E of **Dawn ash Shaykh** (18°37'N., 38°50'E.) and then make good a course of 188° for Taclai.

When about 5 miles off the coast on the latter track, alter course to the SSE, keeping from 3 to 5 miles offshore. It may be well to keep a little closer inshore in the vicinity of latitude 17°07'N, to avoid the patches on the E side of the channel.

It should be borne in mind that the reefs close off the mainland do not always show, and that the reefs on the E side of the channel are steep-to.

From a position 4 miles E of **Ras Arb** (15°48'N., 39°27'E.), steer to pass 2 miles NE of Isolotto Madote and 7.5 miles NNE of Ras Gurma. Mount Faraon is a good landmark.

From this position, steer to pass 5.5 miles NNE of Punta Shab Shakis, taking care to avoid a small coral bank 7.5 miles NNE of the point. If heading N in this channel, follow the directions in an inverse order.

**Caution.**—The area between the S end of the Suwakin Archipelago and Isola Difnein has not been closely examined, except for a distance of about 10 miles offshore from Ras Kasar to the S.

The general prevalence of thick haze in winter often renders the approach from the NE to the N passage by the aid of shore marks difficult, and sometimes impossible. As a rule, when the haze is thickest, the sky is clear, and astronomical observations can be obtained.

When clouds prevail, usually with N winds, the land is comparatively clear, although the highest peak may be capped.

A landfall should be made near Kavet, if possible, shortly before daylight, because of the difficulty in distinguishing the disused light structure in hazy weather.

# Mitsiwa Harbor (Massaua) (Massawa) (15°37'N., 39°28'E.)

World Port Index No. 47900

**5.12** Mitsiwa Harbor is separated by several islands, connected to the shore by causeways, and peninsulas into three main sections.

The bays are grouped as Dachilia (Khor Daklyat); Seno Cherar and Seno T'walet Ye Bahir Weshmet (Gherar Bay and Taulud Bay); and Hirghigo Bahir Selat'e (South Anchorage). Fringing reefs and shoal patches encumber most of the water areas of the port.

**Winds—Weather.**—Land and sea breezes prevail throughout the year. The sea breezes blow from the NE and are always stronger than the land breezes. Strong SE winds raise a swell and the connecting causeways are sometimes flooded.

In summer, when the sea breezes are usually light, there are many days of calm with very high temperatures. During this season, sudden squalls, forewarned by dense curtains of sand, come down from the hills. Vessels intending to remain should moor with care. These squalls are rare in winter.

In the winter, W winds prevail in the morning, SE winds prevail in the afternoon, and S winds prevail in the evening. In the summer, N winds prevail in the morning, NE winds prevail in the afternoon, and E winds prevail in the evening.

Heat and humidity are serious problems. Temperatures reach their highest during June through September, when they are accompanied by the greatest humidity. The climate of Mitsiwa is intensely hot but generally not unhealthy; fever appears to be prevalent from the end of April to the early part of May.

**Tides—Currents.—**Tides here are semidiurnal, with a mean range of 0.7m. The spring range is 0.9m.

**Depths—Limitations.**—The 20m curve lies close off the entrances to Dachilia and the Commercial Harbor. Seaward of this line lie depths of 30m and over, while inshore, fringing reefs extend up to 0.3 mile offshore. Depths off the entrance to the South Anchorage range from 11 to 26m, but fringing reefs and shoal patches are present.

The port can accommodate vessels up to 27,000 dwt, with a maximum draft of 9.6m.

Marine Pier extends NNW then NW from the S entrance point of Dachilia. Tankers, with a maximum draft of 9.1m, can be accommodated stern-to. Berthing and unberthing can be done only during daylight hours.

New Jetty extends from the coast about 0.3 mile SW of the head of Marine Pier. It has a 109m long berth on each side, both of which have a depth of 8.9m alongside.

The Commercial Pier has six berths, with a total length of 860m and alongside depths of 4.9 to 9m. The AGIP Terminal is 180m long, with an alongside depth of 11m. The Mobil Terminal is 160m long and has an alongside depth of 9.1m.



#### Mitsiwa Harbor



## Mitsiwa Harbor—Governor's Palacer

An oil pier, which will accept drafts up to 8.9m, extends from the W shore of the South Anchorage, to which vessels usually tie up stern-first, and med-moor.

**Aspect.**—When seen from a distance, the light structure on the E end of the island of Mitsiwa is conspicuous. Other good landmarks are the water tower, about 0.2 mile W of the E end of the island of Mitsiwa; the Governor's Palace, a white building with a damaged dome, on the N end of the island of

Taulud; and Sheikh Said, a sandy island covered with mangroves, S of the island of Mitsiwa. A rough stone breakwater extends about 0.2 mile SSE from the SW extremity of Mitsiwa.

A naval signal station, 33m high and painted blue, stands close SE of the radar tower, near the root of the N breakwater. A conspicuous chimney stands about 1 mile NNW of the N extremity of the mole in Dachilia.

**Pilotage.**—Pilotage is compulsory for vessels over 100 grt and is available 24 hours a day, except for tankers, which can only berth during daylight hours. The pilot boards 0.75 mile E of the harbor entrance. Pilots board from a white launch with the letter "P" painted in black on the vessel's sides.

Vessels should pass their ETA to the pilot through the vessel's agent at least 72 hours in advance, confirming or amending it 24 hours before arrival.

**Regulations.**—Only one vessel may maneuver in the harbor at a time.

Vessels are required to maintain enough members of the crew aboard to enable the vessel to be moved at any time.

The vessels engines shall not be shut down completely without the Harbormaster's permission.

**Signals.**—The port signal station is in Mitsiwa about 0.2 mile W of Ras Mudur. Traffic signals, consisting of lights at night and flags of the International Code of Signals by day, are shown from the signal station. The signals and their meaning are given in the accompanying table.

Mitsiwa Harbor Traffic Signals				
Day signal	Night signal	Meaning		
Black ball or cone	One red light	A vessel is entering, leaving, or maneuvering in the port. When this signal is shown, no other vessel may enter or leave the port.		

Mitsiwa Harbor Traffic Signals				
Day signal	Night signal	Meaning		
Flag Z	Two red lights over one white light, vertically disposed	A vessel approaching the port is 15 miles distant from N.		
	Two white lights over one red light, vertically disposed	A vessel approaching the port is 15 miles distant from S.		
Pennant No. 2	Two red lights	A vessel approaching the port is 10 miles distant from N.		
	Two white lights	A vessel approaching the port is 10 miles distant from S.		
Flag O	One red light over one white light, vertically disposed	A vessel approaching the port is 5 miles distant from N.		
	One white light over one red light, vertically disposed	A vessel approaching the port is 5 miles distant from S.		

Vessels bound for Mitsiwa Harbor should establish radio communication with the Mitsiwa Radio Station.

**Anchorage.**—If advised to anchor out by the signal station, anchorage is available about 1 mile E of the S breakwater, in depths of 32m, holding ground reported good.

Anchorage can be taken, with the permission of the port manager, in the harbor N of the island of Mitsiwa, in 10.9 to 16.4m, mud, good holding, but with little swinging room. The entrance range is a good mark for anchoring, and vessels may haul their sterns into the main quay.

In Dachilia, anchorage can be taken, in 10.9m, mud, in its outer part, or in lesser depths in the NW part. Anchorage is prohibited in the area as shown on the chart E of the entrance of Dachilia. It is also prohibited in the area between the islands of Mitsiwa and Sheikh Said.

In the South Anchorage, which is entered S of **Sheik Said Island** (15°36'N., 39°29'E.), vessels can take anchorage, in 11.9m, about 0.3 mile WSW of the S end of the island of Taulud. It is encumbered by reefs extending from the shore and by isolated shoals.

**Caution.**—Many war-damaged buildings may not be useful for navigational reference.

A wreck, best seen on the chart, lies in the entrance to Seno Twalet Ye Bahir Weshmet and has a least depth of 10.7m. A dangerous wreck lies sunk in a position about 0.8 mile W of the S end of the island of Taulud.

A concrete column, about 2m in diameter and sometimes showing 1m above water, stands on the S side of the fairway, in a position about 1 mile S of the S end of the island of Taulud.

## Mitsivva to Aseb

**5.13** Hargigo Bahir Selate (15°33'N., 39°30'E.) is entered between Sheikh Said and Ras Nauret, a point marked by a beacon about 5 miles SE. The coast in the vicinity of the bay is low, rising gradually to the base of the coastal hills. Archico, a village on the W shore of the bay, has several white houses, a conspicuous minaret, and a pier.

**Ras Amas** (15°32'N., 39°35'E.), a coral point lying about 1 mile ESE of Ras Nauret, is low and rounded. A 4.9m shoal, marked by discolored water, lies about 2 miles E of Ras Amas.

**Zula Bahir Selate** (15°30'N., 39°40'E.) is entered between Ras Amas and Ras Corali, the N extremity of Penisola di Buri. Deep water is generally found near the shore, though in places reefs extend about 1 mile offshore.

**Monte Ghedem** (15°25'N., 39°33'E.), on the W side of the gulf about 6 miles S of Ras Amas, is prominent and in clear weather can be seen from N of Isola Harat. This landmark is an isolated wooded mountain mass, irregular in shape and rounded. The summit consists of a small pyramidal peak with several small peaks of nearly the same elevation.

**Isola Dissei** (15°28'N., 39°45'E.) is volcanic, with a series of conical peaks, the summit of which is Monte Dissei, in its S part. A beacon stands on the summit of Monte Dissei. A reef extends 4.5 miles N from Isola Dissei, almost connecting with the reef fringing Isollotto Madote, which is described in paragraph 5.16.

Monte Aleita, in a position about 13 miles SSW of Ras Corali, when seen in range with Isola Dissei appears wedge-shaped, the bluff being to the NW.

**Anchorage.**—Anchorage can be taken off the entrance of a small inlet on the SE side of Isola Dissei. A good berth is in 12.8m, sand, with the N part of the inlet bearing 290° and Monte Dissei bearing 218°.

Care should be taken in approaching this anchorage, as the depths decrease rapidly. A shoal with depths of 0.9 to 4.5m and some rocks at its SE end lies about 0.3 mile ENE of Monte Dissei and about 0.1 mile offshore.

**5.14** Isola Ota (15°30'N., 39°49'E.), small and flat-topped, lies about 3 miles W of Ras Corali, at the N end of a drying reef extending S to the coast.

**Canale di Dissei** (15°30'N., 39°48'E.), lying between Isola Ota and Penisola di Buri on the E and Isolotto Madote and Isola Dissei on the W, is generally deep, though several shoals and rocks lie in it.

Seil, an islet, 17m high and fringed by a reef, lies in midchannel, about 2 miles E of Monte Dissei; Seil can be passed on either side.

Two white rocks, 3.9m high and fringed by a reef, lie about 1 mile SSE of the S end of Isola Dissei; a 3.2m patch lies midway between them.

About 1 mile ESE of these rocks are two more white rocks, 4.5m high, also fringed by a reef. Indore Rocks, a group of coral heads with less than 1.8m, lie about 0.3 mile E of the latter two rocks.

It was reported that even in a favorable light, these coral heads cannot be seen from aloft. Vessels proceeding through the S entrance of Canale di Dissei should keep to the E side of the passage, where the coastal reef is steep-to and extends about 0.2 mile offshore.

**5.15 Ras Makato** (Ras Malcatto) (15°15'N., 39°43'E.) lies 18 miles SSE of Ras Amas. The intervening land rises gently from the coast to Monte Ghedem and other high land. The village of Zula lies 2.5 miles W of the point.

The ancient Greek ruins of Adulis lie 0.75 mile NW of the village. A pier stands close S of Ras Makato.

Anchorage can be taken in about 20.1m about 1 mile off Ras Makato.

**Arafali** (15°05'N., 39°45'E.), a village at the head of Zula Bahir Selate, consists of a collection of mud huts. There are three conspicuous extinct craters about 1 mile S of the village.

Vessels can take anchorage close off Arafali, in 9.1 to 37m, mud, W of a shoal with a least depth of 3m extending NE from the village.

**Dolphin Cove** (Seno de Dolphin) (15°08'N., 39°50'E.), a small bight in the coastal reef, has general depths of 6.4 to 14.9m. The shore of the bight is low and flat, but about 1 mile inland the land rises to a rocky ridge 150m high.

Two beacons, in range 084°, lead through the entrance to the anchorage, in 12.8m, sand and mud, good holding ground.

**Melita Bay** (Baia di Melita) (15°15′N., 39°49′E.), entered E of Ras Nasiracurra, is nearly filled with reefs; the shore consists of mangrove swamp, backed by a grassy plain about 6.1m high. A beacon, 3m high, stands on the edge of the plain in the NE part of the bay. A 4.5m shoal extends about 1 mile S from Ras Nasiracurra. Several detached patches, with depths of 6.7 to 11.9m, lie 0.5 mile SSE through E of the same point.

**Anchorage.**—Anchorage, sheltered from all except S or SW winds, can be obtained in the entrance of Melita Bay, in about 18.3m, sand and coral.

**5.16** Isolotto Madote (15°35'N., 39°46'E.), on the SW side of the fairway leading to The Narrows, is 2.4m high and sandy. The islet lies on the W side of a reef. The S edge of this reef is nearly connected to the reef extending N from Isola Dissei. The islet is marked by a light.

**Secca Mugiunia** (15°36'N., 39°43'E.), about 3 miles NW of Isolotto Madote, is a rocky patch that is partially awash and generally visible.

**Anchorage.**—Anchorage can be taken, in 18.3 to 27.4m, about 1 mile NW of Isolotto Madote; the depths increase rapidly farther out. Anchorage, in 16.5 to 20.1m, is also available 0.5 to 1 mile NE of Secca Mugiunia.

**The Narrows** (15°33'N., 39°57'E.), lying between the N part of Penisola di Buri and the SW side of Dehalak Deset, consists of three deep channels, divided by Isolotti Assarka and Isola Shumma.

The reefs fringing the mainland and islands are steep-to and visible; the land on either side consists of coral cliffs, about 1.8m high, which are well-defined.

The main channel, between Isolotti Assarka and Isola Shumma, is 2.5 miles wide, with 58 to 75m in the fairway, and passes NE of the 10.1m shoal about 2 miles ESE of Isolotti Assarka.

**Isolotti Assarka** (15°32'N., 39°55'E.), two small islets about 1 mile apart, lie on the SW side of the main channel. The NW islet is 6.1m high and mostly bordered by low cliffs. A bank, with a least depth of 3.9m, extends about 1 mile from the SE end of the NW islet.

The SE islet is 4.5m high and sandy; a drying reef extends about 1 mile SE from it. A bank, with a least depth of 8.5m, extends S from the SE islet. The NW islet is marked by a light.

**Isola Shumma** (15°32'N., 40°00'E.), on the NE side of The Narrows, is 15m high, marked by a light, and bordered by reefs extending as far as 0.5 mile from its NE and SW sides.

**5.17 Port Smyth** (15°32'N., 39°59'E.), an opening in the coastal reef on the SW side of Isola Shumma, affords anchorage, in 5.8 to 7.6m, sand and weed, good holding ground.

The entrance, about 110m wide and with a least depth of 6.7m, lies between the edge of the reef on the SE side and a 1.8m patch on the NW side.

A beacon, 2.4m high, marks the edge of the reef on the SE side of the entrance; another beacon, 2.4m high, marks the 1.8m patch on the NW side of the entrance.

A rocky patch, nearly awash, marked by a pole beacon surmounted by a cylinder, lies about 0.1 mile NE of the SE entrance point.

Two buoys, about 46m apart, lie near the edge of the reef on the NW side of the entrance.

Two beacons, in range about 056°, stand at the head of Port Smyth and lead in through the entrance.

The front beacon is a white stone pyramid, while the rear beacon is a stone pyramid that is painted in black and white bands.

A vessel should enter this port on the range line until the beacon on the rocky patch about 0.1 mile within the entrance bears about 100°, then alter course N and anchor as convenient. It is prudent to have a boat ahead when entering. A pier extends from the shore, close SE of the front range beacon.

The NE coast of Penisola di Buri is low, and, in places, reefs extend as far as 0.5 mile offshore. Monte Dule, a conical hill rising to a height of 218m, stands about 10 miles SSE of Ras Corali. This landmark is the summit of a range of hills extending NW.

Monte Dule forms a good landmark, but must not be mistaken for Monte Dissei on Isola Dissei; the latter has a similar appearance from N, but is only half its height.

**Isola Delemme** (15°30'N., 39°54'E.), 7.6m high and partially wooded, lies on the edge of the coastal reef, close E of Ras Corali. During S winds, there is fair anchorage, in 18.3 to 27.4m, mud, NW of Isola Delemme. Strong SE winds send a

troublesome swell into this anchorage. Landing is difficult at times

Isolotto Umm Namus, small and with conspicuous white sand patches on the N and S sides, lies in a position about 10 miles SE of Isola Delemme.

Sheltered anchorage can be taken between the coast and Isolotto Umm Namus according to the direction of the wind; it should be taken nearer the islet, both for shelter and to avoid the 6.9m patches off the coast.

**Fawn Shoal** (15°23'N., 40°10'E.), with a depth of 9m, lies about 5 miles E of Isolotto Umm Namus. Discolored water has been reported about 2 miles NE of the shoal. A well head, with a depth of 14.6m, lies about 2 miles E of Fawn Shoal.

**Isola Dehalak Deset** (15°37'N., 39°58'E.), the largest island on Dahlak Bank, is generally low.

**Monte Im Ium** (15°43'N., 40°02'E.), a conspicuous wedge-shaped mound when seen from SW, stands on the NE shore of Gubbet Mus Nefit. A beacon stands on Monte Im Ium.

**Ras Malcomma** (15°37'N., 39°58'E.), the SW extremity of Isola Dehalak Deset, has a drying reef extending about 2 miles W. Seil Baius, a small black islet, stands on this reef.

Isolotto Enteara, 1.8m high and sandy, lies at the W end of a bank, with depths less than 18.3m extending about 5 miles WNW from Ras Malcomma. Its beach shows in the sun.

A channel, nearly 0.5 mile wide, lies between the reef fringing Isolotto Enteara and the coastal reef extending W and NW from Ras Malcomma.

Vessels may anchor in this channel, but it should be approached with caution.

**5.18 Gubbet Mus Nefit** (Sogra) (15°41'N., 40°00'E.), a large bay on the W side of Isola Dehalak Deset, is deep, but vessels can anchor close to the shore. Nokra Deset divides the entrance of the bay into two channels.

The channel S of the island is about 0.1 mile in width and has depths of 10.1 to 25.6m, which increase rapidly both inside and outside the channel. The channel N of the island is suitable for boats only.

**Nokra Deset** (15°43'N., 39°56'E.) is interspersed with small valleys, low patches of grass, and a few palms. On the S side of the island there is a village; on the NE shore of the island there are two inconspicuous lime kilns.

A reef, nearly awash, extends about 1 mile SSE from the N shore of the bay, close within the entrance, E of Isola Nokra Deset. A small islet lies on the W edge of the middle of this reef.

**Tides—Currents.**—Tidal currents in the entrance of the bay attain a velocity of 1 to 3 knots. Vessels should enter or leave when the current is setting in the opposite direction to which the vessel is proceeding, and about 15 minutes before the time of HW or LW, when the tidal currents do not have a velocity of more than 1 knot.

**Aspect.**—Two beacons, in range 031°, lead through the first reach of the main channel S of Nokra Deset. The front beacon, a white pyramid, stands close offshore S of the village on the S side of the island; the rear beacon, a black pyramid, stands about 1 mile NNE of the front beacon.

Another rear beacon, a white pyramid with a black stripe, stands about 0.1 mile W of the above front beacon. These two

beacons in range  $276^{\circ}$  lead through the second reach of the main channel.

A beacon stands on the SE edge of a reef close off the SW extremity of Nokra Deset.

A buoy marks the SE entrance of the channel, and is moored about 0.3 mile SE of the SW extremity of Nokra Deset.

A beacon stands on Isola Dehalak Deset, about 0.2 mile ESE of **Ras Bulul** (15°42'N., 39°57'E.).

A beacon stands on the small islet lying on the reef which extends SSE from the N shore of the bay E of Nokra Deset.

A beacon stands on a rock, awash, on the above reef, about 0.3 mile SSE of the small islet.

A beacon stands on Nokra Deset, also in a position about 1 mile NW of the island's SE extremity. Another beacon stands on a point about 2 miles NE of the same point.

**Anchorage.**—Anchorage can be taken, in 9.1 to 14.6m, sand, in the channel E of Nokra Deset about 1 mile N of the island's SE extremity.

Anchorage can also be taken, in 18.3m, sand, in the outer part of an inlet on the SW side of Gubbet Mus Nefit and about 2 miles SE of the entrance of the bay.

One can anchor in an inlet about 4 miles farther SE, in 12.8 to 20.1m, sand.

#### Penisola di Buri to Ras Shakhs

**5.19 Howakil Bay** (15°10'N., 40°15'E.) is a extensive bay lying between Ras Lamma Tacaito, the SW extremity of the N coast of Penisola di Buri, and Andeba Ye Midir Zerf Chaf, about 31 miles ESE. The bay is encumbered with islands and reefs.

There are several good anchorages under the lee of the outer islands, but great caution is necessary in approaching them.

There are numerous mountains and hills inland in this vicinity, some are in ranges while others are isolated volcanic cones.

In very clear weather, the Ethiopian mountains may be seen rising is successive ranges to an elevation of about 3,050m.

**Andeba Ye Midir Zerf Chaf** (Ras Andadda) (15°02'N., 40°32'E.) is the N extremity of a promontory, on which rise two double-peaked hills.

Beach Hill, a conspicuous double-peaked hill, rises close within **Ras Herbe** (15°00'N., 40°34'E.).

It can be seen for a distance of 18 miles and has the appearance of an island, the land around being very low. Other volcanic hills rise from the plain behind Beach Hill, but they are not quite as conspicuous.

**Secca Muhammad** (15°09'N., 40°44'E.), 13 miles NE of Ras Herbe, has a least depth of 3.6m, coral, and is visible from some distance. A 15.5m coral patch lies about 5 miles SSE of Secca Muhammad.

**Abu el Cosu** (15°18'N., 40°34'E.), about 13 miles NW of Secca Muhammad, is a steep-to coral reef that shows well. A large portion of this reef dries.

**Ras Gurmal** (14°58'N., 40°38'E.), 4.9m high and connected to the coast by a low neck of sand, has the appearance of an island from close inshore.

**Ras Manrec** (14°54'N., 40°43'E.) is a peninsula presenting a broad face seaward. This peninsula is connected to the coast by a low neck of sand, and backed by a mangrove swamp.

Several shoals of 9.6 to 11.4m lie close within the 20m curve along this part of the coast.

**Anchorage.**—During fine weather, anchorage can be taken, in places, from 1.5 to 3 miles off this part of the coast, in 14.6 to 25.6m.

**5.20 Anfile Bay** (Baia d'Anfile) (14°45'N., 40°50'E.), encumbered with many islands and shoals in depths less than 11m, is entered between **Isola Midir** (14°52'N., 40°45'E.) and Ras Anfile, about 11 miles SE. The land backing the shore is a vast plain dotted with small hills.

Monte Faraon, about 4 miles SW of Isola Midir, consists of three black cones, the southernmost and highest of which rises to 130m. The northern most is 128m high and the third cone is lower and truncated. These cones are very conspicuous on a clear day.

Isolotti Barm-al-Agi lie on a bank with a least depth of 2.7m, which lies in the entrance of Anfile Bay, E of Isola Midir. The outer islet, 5.8m high, is flat and bare; the inner islet, which is the larger of the two, is 10m high with some bushes on it.

A shoal spit extends about 1 mile W from the W end of the outer islet; a 5m patch lies about 2 miles SE of the same islet. Shoals and reefs surround the inner islet and extend as far as 0.5 mile SW from it.

**Anchorage.**—During S winds, good anchorage can be taken, in 12.8 to 14.6m, sand and mud, about 1 mile N of the inner islet of Isolotti Barm-al-Agi.

Anchorage can also be taken, in 16.5m, mud, and about 1 mile S of the same islet. Derebsasa Deset (Isola Grabsus), about 1 mile N of Ras Anfile, is 7.6m high and covered with bushes. A beacon stands on the W part of the island.

A shoal spit extends about 1 mile SW from the W end of the island and terminates in a rock, awash.

Anchorage can be taken, in 11.9 to 14.6m, sand, about 1 mile N of the W end of the island.

**5.21 Ras Anfile** (14°43'N., 40°53'E.) is coral and fringed by a reef; on SSW bearings it has the appearance of an island.

The coast between Ras Anfile and Ras Shakha, about 18 miles ESE, is low and sandy, with several small indentations, but shows as an unbroken line. Several shoals, with depths less than 6.9m, lie as far as 2.5 miles off this part of the coast.

**Ras Anrata** (14°42'N., 40°57'E.) is low and has the appearance of an island close to the shore.

The village of Tio, consisting of several conspicuous buildings, stands on this point. The shore lights in vicinity of Ras Anrata are reported to be visible for a distance of 8 miles.

**Punta Shab Shakhs** (14°39'N., 41°07'E.) is low and sandy. Shab Shakhs, with depths less than 2m, extends about 3 miles N from Punta Shab Shakhs. This shallow spit does not show well and, with depths of 18.3 to 27.4m close off, offers little warning of its proximity.

The light structure on Punta Shab Shakhs is reported to give a good radar return in comparison to the surrounding coastline.

Anchorage can be taken, in 14.6m about 5 miles NW of Punta Shab Shakhs.

**Ras Shakhs** (14°38'N., 41°12'E.) is low and sandy. Between the point and the base of the mountains is a broad flat plain, which renders the low point inconspicuous. Under some conditions, this point is dangerous to approach, as it cannot be seen until close-to.

South Mitsiwa Channel is entered N of Ras Shakhs. Caution is advised as several shoal patches lie within the entrance, and are best seen on the chart. See paragraph 5.4 for information on weather and currents.

# Ras Shakhs to Ras Terma

**5.22** The coast between Ras Shakhs and **Ras Terma** (13°14′N., 42°33′E.) is backed by ranges of high volcanic mountains sloping to the sea. Monte Anrata stands at the W end of a hilly range, about 12 miles WSW of Ras Shakhs. It has the appearance of a round summit on the E side of a flat ridge. This hilly range extends E for about 10 miles and terminates in Monte Ghedele.

Some of the peaks in this range, though lower than Monte Anrata, are conspicuous because of their jagged shapes. They often may be seen when the higher and more distant mountains are obscured by haze.

Another range extends about 13 miles S from Monte Anrata and terminates in a round summit 1,250m high. Monte Cosar, 700m high, stands about 15 miles S of Ras Shakhs and shows well.

**Monte Endel** (13°50'N., 41°55'E.), marked by a pillar, is conical in shape. Close NE are two conical hills, not quite so high, which appear as one when seen from ENE. Monte Sachsohe, marked by a pillar, stands about 3 miles SE of Monte Endel.

**Picco Aguzzo** (13°35'N., 41°49'E.) lies about 16 miles SSW of Monte Endel. About 5 miles farther SSW is another mountain, 1,549m high. Both of these mountains have sharp peaks on their SW ends. A smooth-topped mountain rises to a height of 2,131m about 8 miles farther SSW.

On the W side of the N approach to Bab El Mandeb, **Gebel Aduali** (12°57'N., 42°26'E.) stands about 18 miles SSW of Ras Terma and is the highest peak in the vicinity.

A range of well-defined and conspicuous peaks, which connects with the high land S of Baia di Beilul, extends E from Gebel Aduali toward the coast.

**5.23 Tagi Terara** (Gebel Tachi) (13°03'N., 42°39'E.), about 14 miles ENE of Gebel Aduali, is a conical peak.

Monte Garzale, similar to Tagi Terara, stands about 4 miles WSW of the latter. Sela Terara (Monte Sellal), dark and conspicuous, lies about 5 miles SE of Tagi Terara.

Monte Marcale, about 11 miles W of Sela Terara, resembles the latter from some directions, but it is much more towering.

**Monte Abu Lulu** (12°38'N., 42°54'E.) is a tableland, on the SE side of which is Monte Ann, an isolated cone, 334m high. Monte Potosi, about 1,524m high, lies about 27 miles W of Monte Abu Lulu. It has two clefts and is a good mark.

Massif Du Ada-Ali, about 10 miles SE of Monte Abu Lulu, is 500m high. Massif du Maghaira, the continuation W of Massif du Abu-Ali, rises to a height of 679m and is the highest hill in the vicinity.

**Baia di Edd** (Baia di Ed) (13°56'N., 41°43'E.) is shallow, with a sandy plain at its head. The village of Edd (Ed), at the head of this bay, has some white buildings at its W end and a mosque with a minaret at its NE end. Backing the S part of the bay is a promontory of black rocky lava, 10 to 15.2m high.

**5.24 Kordumuit Deset** (Isola Cordumiat) (14°06'N., 41°40'E.) is a rugged bluff volcanic island, 83m high, lying about 4 miles offshore. A reef, with a least depth of 4.6m, extends about 2 miles W.

A bank, with depths of less than 10m and on which an islet lies, extends about 1 mile N from the island.

**Isolotti Kordumuit** (Isolotti Curdumiat) (14°04'N., 41°39'E.), consisting of several islets, lie about 2 miles SSW of Kordumuit Deset and within the 10m curve. Between these islets and the coast there are depths of 6.4 to 8.2m, which should only be navigatedd by vessels with local knowledge. A dangerous wreck lies sunk about 4 miles WNW of Kordumuit Deset and about 2 miles offshore.

**Anchorage.**—Anchorage can be taken, between Kordumuit Deset and the islets S, in 25.6m, good holding ground; it should only be used in calm weather, as it affords no shelter.

**Ras Sceraier** (Ras Bugeni) (13°46'N., 42°02'E.) lies about 21 miles SE of Edd; the intervening coast is rocky with several indentions.

Ras Sceraier is the N end of a promontory, rising to Monte Ascoma, 110m high. A conspicuous brown hill with a flat summit, about 61m high, stands on the coast at Ras Sceraier.

**Mersa Dudo** (13°52'N., 41°54'E.) lies on the W side of a promontory which rises to Monte Dudo, about 7 miles ESE of Ras Alob. A pillar stands on Monte Dudo.

**Anchorage.**—Anchorage can be taken in Mersa Dudo, in 12 to 14.6m, mud and sand, good holding ground, with Monte Endel bearing about 160° and the N extremity of Isola Sadla about 080°.

Isola Sadla lies within the 20m curve in a position about 1 mile NE of Monte Dudo. There is a saddle-shaped hill at the NE end of the island, and a pillar on a hill at the S end of the island.

Somewhat sheltered anchorage can be taken S of Isola Sadla during NW winds, in 14.6 to 20.1m, good holding ground.

Abeilat Island, about 2 miles E of Isola Sadla, has three hummocks on it, the SW one 120m high. The island is fringed by a reef. Anchorage can be taken SE of the island, where there is fair shelter from N winds.

**5.25 Bavaisole Bahir Selate** (Barassoli Bay) (13°40'N., 42°10'E.) is encumbered with islets and rocks. From the head of the bay, the land gradually rises to an elevation of 268m about 7 miles from the coast.

Several islands, including **Tekay Deset** (Isola Rachmat) (13°40'N., 42°13'E.), lie on the reef extending NW from Penisola Cabia.

When seen from a distance, these islands and the other islets in the bay appear to be a continuation of a range of hills extending from the high lands to the coast.

Dannabah, at the NW end of the reef extending from Penisola Cabia, is partially covered with mangroves and has several peaks over 30m high.

**Anchorage.**—Good anchorage, sheltered from S and SE winds, can be obtained N of a line joining the N extremity of Tekay Deset and **Seil Selafi** (13°41'N., 42°08'E.), in 6.9 to 8.2m, or SE or W of Seil Selafi, in 6.4m.

Three white and rocky islets lie in the approach to Bavaisole Bahir Selate, in positions from 5 to 6 miles NW of Tekay Deset.

Northwest Fanaadir, Northeast Fanaadir, and South Fanaadir form the group. Fanaadir Rock, which dries 0.3m and is generally visible, lies about 2 miles SW of the S islet.

The coast S of Tekay Deset is backed by a low, bare, and sandy desert, which extends some distance inland. From the hills S of Bavaisole Bahir Selate, the mountains extend SE from 5 to 12 miles inland, are intersected by valleys, and appear level from seaward.

The only elevation near the coast visible from a distance is Gebel Beheta Ali, 30m high, standing about 13 miles S of Tekay Deset. A pillar stands on Gebel Beheta Ali.

A stranded wreck lies on the coast in position 13°23'N, 42°22'E. A beacon stands on the coast about 20 miles SSE of the NW extremity of Penisola Cabia.

**5.26** Beylul Bahir Selate (Baia di Beilul) is entered W of **Ras Terma Zerf Chaf** (13°14'N., 42°33'E.). Monte Darma, 95m high and surmounted by a pillar, stands about 1 mile WSW of Ras Terma Zerf Chaf; this hill slopes SW and fronts the E side of the bay.

About 4.5 miles SW of Ras Terma Zerf Chaf is a large white sand patch on the side of the hills in the S part of the bay. It is a good mark when approaching the bay from the N.

Monte Hassalili, surmounted by a pillar, rises in the S part of the bay about 2 miles inland. To the W, the hills are lower; farther W, on the W side of the bay, is a flat clay plain.

The village of Beylul lies about 3 miles inland on the W side of the bay. There is a conspicuous tree standing about 2 miles NE of Beilul; SE of it are conspicuous huts.

Isolotto Bianco, 12.8m high, lies 0.5 mile offshore on a spur of the coastal reef N of the conspicuous sandy patch previously mentioned.

**Anchorage.**—The best anchorage is W of the promontory on the E side of Beylul Bahir Selate, in 14.6 to 16.5m, with Isolotto Bianco bearing 216°. This anchorage is approached with the conspicuous white sandy patch bearing 180°. South winds impede and sometimes prevent boat work.

Between Ras Terma Zerf Chaf and Ras Lumah Zerf Chaf (Ras Lumah), the NW entrance point of Bay of Aseb, about 16 miles SE, the coast is low and fringed by reefs, extending as far as 1 mile offshore. A group of hills, 15.2 to 24m high, lie about 7 miles SE of Ras Darma and 1.5 miles inland.

**5.27 Sanahbor Deset** (Isola Sanah Bor) (13°05'N., 42°43'E.), 85m high, lies on a shoal, with depths less than 9.1m. A passage, about 0.3 mile wide, with depths of 11 to 14.6m, lies between the S end of this shoal and the coastal bank.

**Ras Lumah Zerf Chaf** (Lumah Zerf Chaf) (13°02'N., 42°45'E.) is reported to give a good radar return up to a distance of 18 miles.

**Bosanquet Shoal** (13°05'N., 42°48'E.), with a least depth of 5.2m, sand and broken shells, lies about 5 miles NE of Ras Lumah Zerf Chaf; this shoal is indicated by discolored water.

**Fieramosca Shoal** (13°08'N., 42°51'E.), about 4 miles NE of Bosanquet Shoal, is composed of coral and has a least depth of 5.5m.

**Secche Scilla** (13°01'N., 43°03'E.), 10 miles further SE, is a sand and coral ridge extending in a NW to SE direction. There is a least depth of 4m, and it should not be approached from seaward within a depth of 40m in hazy weather. Strong currents in the vicinity of Secche Scilla generally set parallel with these shoals, but may set toward them.

**5.28 Aseb Bahir Selate** (Bay of Aseb) (13°00'N., 42°45'E.), entered between Ras Lumah Zerf Chaf and Ras Dehaneba Ye Midir Zerf Chaf, about 17 miles SE, affords good sheltered anchorage.

The islands in and off the bay prevent any swell from entering, but during the Northeast Monsoon, the prevailing strong SE winds by day cause a sea rough enough to inconvenience boats.

The town of Aseb stands on the NW shore of the bay. The low coast of this bay is nearly all bordered by reefs, which are narrow along the W shore, but extends 2.5 miles from the S shore.

The S shore of the bay is low, swampy, muddy, and inundated at high tides. Several islets, mere sand cays covered with cactus and other rank vegetation, lie on the reef that extends off the S coast.

**Fatuma Deset** (Isola Fatumah) (13°02'N., 42°52'E.), low and wooded, attains a height of 15.2m at Ras Fatuma, the NE extremity of the island.

**Canale Rubattino** (13°00'N., 42°53'E.), which lies W and S of Fatuma Deset, has several shoals in its E part and should only be used by vessels with local knowledge.

**Caution.**—Mariners are advised to proceed with caution when navigating in Aseb Bahir Selate. The area is inadequately surveyed and uncharted shoals may exist, especially off the edges of the reefs.

# Aseb (13°00'N., 42°45'E.)

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**5.29** Aseb lies on the NW side of Aseb Bahir Selate. The N port limit is drawn from Ras Gombo to the E end of Om el Baher Island. The S port limit is drawn from Ras Marcanah to the S end of an island about 1 mile E of it.

**Winds—Weather.—**During the hot season, from May to September, the climate is particularly unpleasant, being hot and humid, although there is generally a breeze between 0800. and 2000 which affords some relief. From October to April, winds of 11 to 27 knots blow continuously from the SE, ceasing only for short periods at dawn and dusk.

**Tides—Currents.**—The tidal rise at the port is negligible, the diurnal range being 0.5m. Currents in the vicinity have been reported to reach 4 knots during strong SE winds.

**Depths—Limitations.—**With the exception of Bosanquet Shoal, the approaches to the port have general depths of 10.7 to 20m.

Depths of 9.6m and 10m are charted, respectively, 0.3 mile NNE and S of North Jetty. A 3.5m shoal lies about 2 miles ENE of Ras Caribale, while an obstruction and a 2m patch are charted, respectively, 0.4 mile E and ESE of the point.

The main harbor complex consists of North Jetty and South Jetty, located about 2 miles N of Ras Caribale. The complex is protected by an offshore breakwater about 0.4 mile long.

The jetties offer alongside depths of 5.5 to 11m, and provides berthing to vessels handling ro-ro, bulk solid, and break-bulk cargoes. It has been reported that petroleum products are also handled here.

Depths alongside are reported to be less than charted, with a 10m patch off North Jetty caused by concrete crumbling from the jetty.

The jetties can accommodate a vessel of 26,000 dwt, with a maximum length of 170m and maximum draft of 8.5m.

An offshore petroleum berth, consisting of a multi-point mooring connected to a submarine pipeline, lies about 1 mile NE of Ras Caribale, and will accommodate vessels with a maximum length of 170m and a maximum draft of 11m.

Small coastal tankers, with a maximum length of 105m and a maximum draft of 7m, can be handled at the pier close N of Ras Caribale.

The Shell Pier, close S of Ras Caribale, can accommodate a vessel of 20,000 dwt, with a maximum length of 175m and a maximum draft of 8.5m. All vessels berth facing SE. A disused salt berth, serviced by an overhead ropeway, is located SSE of Ras Caribale.

**Aspect.**—Monte Ganga Nord and Monte Ganga Sud, about 2 miles, respectively, SW of Ras Lumah Zerf Chaf, are good marks. A conspicuous church with three domes, about 33m high, stands about 0.3 mile SSE of Ras Gombo. There are several ruined buildings on Ras Caribale.

A white two-story building, with a large square tower, stands N of the church; a white one-story building stands S of the church. A conspicuous flare stands 1 mile W of Ras Caribale.

**Pilotage.**—Pilotage is compulsory for vessels over 100 nrt, and is available 24 hours for the commercial harbor and from 0600 to 1800 local time for the oil harbor. The pilot boards about 0.6 mile NE of the head of North Pier. Vessels should send their ETA 72 hours, 48 hours, and 24 hours in advance.

**Regulations.**—Landing on any of the off-lying islands is prohibited. Approaching boats may be fired on without warning. Special regulations are in effect for vessels handling dangerous cargoes.

**Signals.**—Visual signals are displayed from a signal station located just N of North Jetty, as follows:

Aseb Traffic Signals					
Day signal	Night signal	Meaning			
Black ball	One red light	A vessel is maneuvering within the harbor or channels.			
Black cylinder	One red lights over one white light, vertically disposed	A vessel is approaching from N.			

Aseb Traffic Signals					
Day signal	Night signal	Meaning			
Black cone, point up	Two red lights, vertically disposed	A vessel is approaching from S.			

**Anchorage.**—Anchorage, secure in all winds, is available in the S part of the bay.

The quarantine anchorage is located just E of the pilot boarding ground and is best seen on the chart. The anchorage offers depths of 16.8 to 18m.

Anchorage is prohibited seaward of a line joining Ras Lumah Zerf Chaf and Fatuma Deset. Anchorage is also prohibited in an area off the port, best seen on the chart.

**Directions.**—If approaching from N, steer to pass about midway between Sanahbar Deset and Bosanquet Shoal. Alter course to pass 1 mile off the W shore of the bay when due E of Sanahbar Deset.

When approaching from NE, steer for **Monte Sella** (Sella Monte) (13°00'N., 42°42'E.) ahead bearing 241°. This course passes about 2 miles SE of Secca Fieramosca, and 1 mile NW of the shoal, extending from the NW side of Isola Fatmah. When the light on Ras Gombo bears 235°, alter course for Aseb.

If arriving from E, Sanahbar Deset steered for on a bearing of 270° is an excellent mark. When Monte Sella bears 241°, steer for it on that bearing, and proceed as directed above.

**5.30** The coast between **Ras Dehanebe Ye Midir Zerf Chaf** (Ras Dehaneba) (12°54′N., 43°01′E.) and Ras Dumera Ye Midir Zerf Chaf (Ras Dumera), about 14 miles SE, is low and sandy.

The coastal reef extends as far as 3 miles offshore between Ras Dumera Ye Midir Zerf Chaf and Ras Sintian, about 6 miles SE, where it closes the coast. The 20m curve lies about 2 miles off the coastal reef along this stretch of coast.

**Ghinnibad** (12°47'N., 43°05'E.), a village about 3 miles S of Ras Sintian, is easily recognized by the high palms in the vicinity.

**Ras Rehayto** (Capo Raheita) (12°44′N., 43°07′E.), 81m high and conspicuous, extends about 1 mile from the coast. It is blackish in appearance, but on its N slope is a white sand patch. This bluff generally shows up well in hazy weather.

**Ras Dumera Ye Midir Zerf Chaf** (12°43'N., 43°08'E.) is a small rocky projection appearing on some bearings as two peaks and on others as three; one of these peaks is flat.

This promontory, backed by a sandy plain extending 10 miles inland, appears as an island from a distance, but from the E, it is completely obscured by Dumera Deset.

On the shore between Ras Rehayto and Ras Dumera Ye Midir Zerf Chaf, there is a small conical hill and another hill with a projection NW. The rise and fall of the tide completely changes the configuration of the coast between these two points. The coast in this area should not be approached within a depth of 9m.

**5.31 Dumera Deset** (Isola Doumeira) (12°43'N., 43°09'E.), which is double-peaked, lies about 0.3 mile E of Ras

Dumera Ye Midir Zerf Chaf. The island is similar in appearance to this point when seen from a distance and shows up well in hazy weather.

A shoal, with a least depth of 6m, lies about 1 mile N of Dumera Deset. The change in the color of the water when there is much sea makes this shoal clearly visible.

Dumera Deset is reported to give a good radar return up to a distance of 15 miles.

The coast SE of Ras Dumera Ye Midir Zerf Chaf is backed by a low and sandy plain about 10 miles wide to Ras Siyyan, a distance of about 18 miles.

**Siyyan Himar** (Rocher Moulhele) (12°31'N., 43°18'E.), two small rocks, each of which is 1.8m high, lie on a reef about 3 miles NNW of Ras Siyyan and 1.5 miles offshore. This reef dries near its SE end. A dangerous wreck lies about 2 miles N of Ras Siyyan.

#### Ras Bab al Mandeb

**5.32 Ras Bab al Mandeb** (12°31'N., 43°30'E.), the S entrance of the Red Sea, is divided by Perim into two straits. Large Strait lies between the African shore on the W and SW and Perim on the NE; Small Strait lies between the latter island and the Arabian shore. Large Strait is recommended, as many casualties have occurred in Small Strait.

TThe NW side of the strait from Aseb to Ras Siyan is described begining in paragraph 5.30, while the coast S of Ras Siyan is described beginning in paragraph 10.2.

The NE portion of the strait's E coast is described beginning in paragraph 7.48, while the coast from Ras Bab al Mandeb S is described beginning in paragraph 8.2.

An IMO-adopted Traffic Separation Scheme (TSS) lies in the waters of Ras Bab al Mandeb and is best seen on the appropriate chart.

**Tides—Currents.—**During the Southwest Monsoon, June to September, the water runs out of the Red Sea; during the Northeast Monsoon, November to April, it runs in. The surface set in the straits, the resultant of the currents caused by the wind and the tidal currents, is very variable.

The current in the straits sets approximately in the direction of the wind and attains a velocity of 1.5 knots. During November to April, the currents caused by the strong SE winds often overcome the SE tidal currents, and there may be a NW set of from 0.5 knot to 3.5 knots.

In November and December, many years ago, during fairly strong SE winds, this set to the NW was observed extending from Large Strait to the parallel of 13°N, at a velocity of 1.5 to 3.5 knots.

The NW set close SW of Perim turns sharply N round Balfe Point, its W extremity.

In June and July, many years ago, during light NW winds, the currents generally set SSE off this island at velocities of less than 0.5 of a knot, to 1.5 knots.

From recorded observations made in January, many years ago, at a position 7 miles SW of Perim, it appears that the surface currents set into the Red Sea at an average velocity of 1.5 knots and are greatly influenced by the tidal currents during this period.

From about 8 hours before to 4 hours after the highest HW at Perim, the NW set was from 1.5 to 2.5 knots. While from 4

hours after to 8 hours before the highest HW at Perim, the velocity was from 0 to 1.5 knots.

The tidal currents are very irregular, both in velocity and duration. Sometimes in the middle of the strait, there is a feeble SE current, while at other times, it attains a velocity of 4 knots and causes ripples when against the wind.

After strong NW or SE winds, the tidal currents setting in the same direction as the wind may continue for 16 hours.

The currents set NW during the rising tide and SE during the falling tide. From recoreded observations in January, many years ago, the tidal currents during this time set each way for about 12 hours; this may be expected, as there is practically only one tide daily in this locality.

At the SE extremity of Perim, the NW current divides, with one part flowing through Small Strait and the other flowing along the SW coast of Perim.

That current flowing through Small Strait appears to divide at the N extremity of Perim, with one part setting NNW and the other rounding Balfe Point. The latter turns SE along the SW coast of Perim and, at 2 to 3 hours before HW, it meets the branch of the NW current.

This causes overfalls, which generally work E to the entrance of False Bay. These currents are much influenced by the wind, and during the period when the current is setting into the Red Sea, the SE current does not appear to run.

**Perim** (Barim) (12°40'N., 43°25'E.) and Perim Harbor, which is located on the S side of Perim, are both described in paragraph 7.58.